

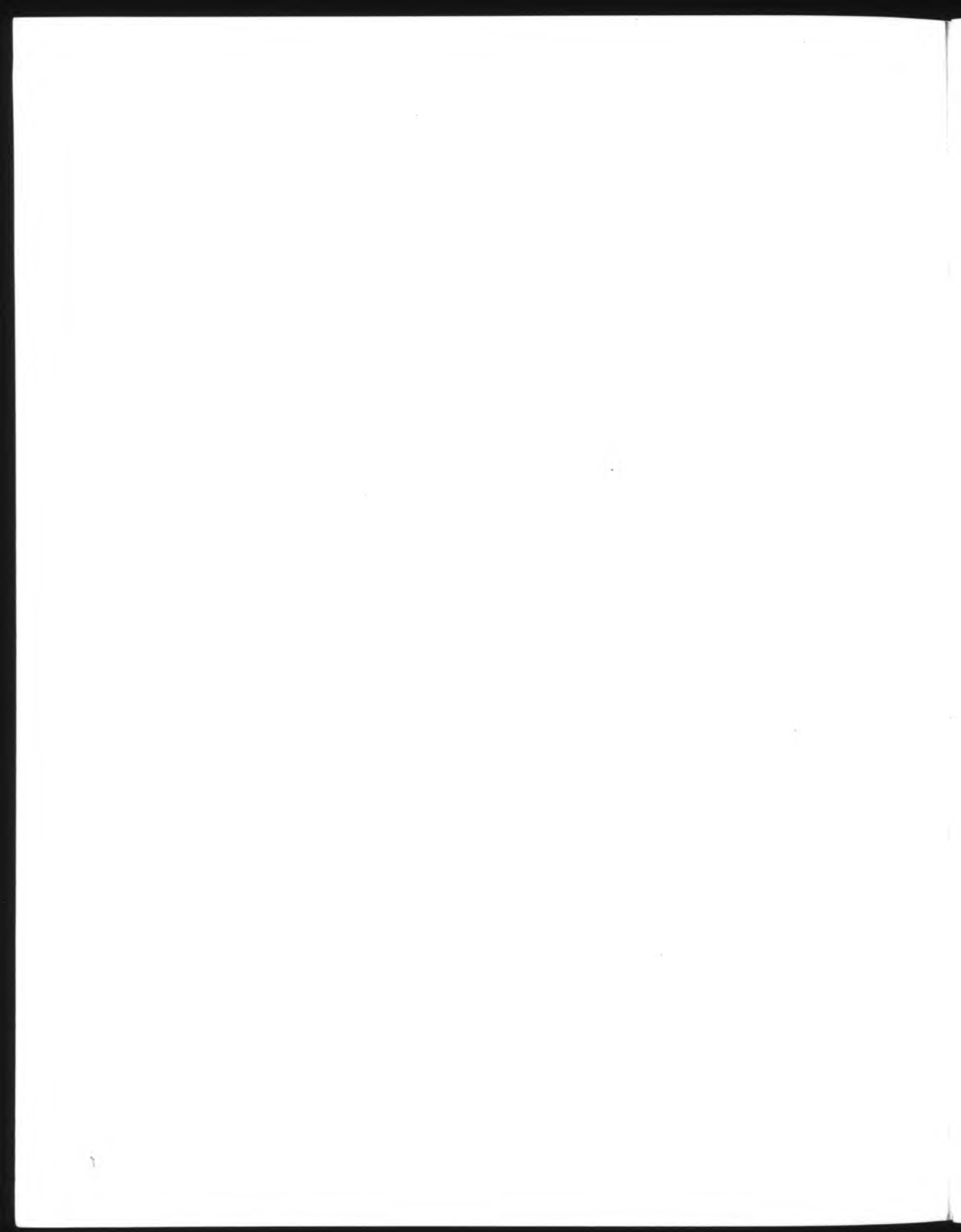
BIENNIAL
REPORT

July 1, 1962
to
June 30, 1964



State of Florida
Game & Fresh Water Fish Commission

F3543s
G192
1962-64





STATE OF FLORIDA

GAME AND FRESH WATER FISH COMMISSION

TALLAHASSEE

A. D. Aldrich, DIRECTOR
O. E. Frye, ASST. DIRECTOR

Ed. Madill, CHAIRMAN
Ronald Wise W. T. McBroom
Marcus Milam K. K. Kennedy

HONORABLE FARRIS BRYANT
Governor of the State of Florida
Tallahassee, Florida

SIR: We have the privilege of submitting herewith the Biennial Report of the Florida Game and Fresh Water Fish Commission, for the period starting July 1, 1962, and ending June 30, 1964.

This report contains detailed outlines on Commission activities, and its major operational divisions, during that period.

Respectfully submitted,

R. B. Aldrich
Director

COMMISSION

THE MEMBERSHIP of the Commission consists of five members, one from each Congressional District, as existing on January 1, 1941. Commissioners are appointed by the Governor, subject to confirmation by the Senate, for a term of five years.

Among the powers granted to the Commission is the power to fix bag limits and to establish open and closed season, on a statewide, regional or local basis. To regulate the manner and method of taking, transporting, storing and using birds, game, fur-bearing animals, fresh water fish, reptiles and amphibians.

During the 1962-64 biennium, the Florida Game and Fresh Water Fish Commission saw several changes in its membership.

First District:

E. L. Madill, appointed December 19, 1961.

Second District:

Charles L. Hoffman, resigned September 21, 1962.

J. B. Davis, appointed September 27, 1962, resigned June 30, 1963.

Marcus Milam, appointed July 19, 1963.

Third District:

Ronald Wise, appointed January 6, 1962.

Fourth District:

W. Thomas McBroom, appointed April 28, 1961.

Fifth District:

F. Don Southwell, resigned December 31, 1963.

K. K. Kennedy, appointed January 8, 1964.

Statement of Policy

It is the declared policy of this Commission that a balanced program of enforcement, research, information and education, administration and programing is required to carry out the objectives of the Game and Fresh Water Fish Commission. Furthermore this Commission believes that the Director is the Chief Administrative Officer and shall be charged with the carrying out of the policy directives of the Commission and the performance of the routine administrative functions including personnel selection, promotion policies, research, development and programing.

The Commission reserves unto itself the power for making all major policy decisions collectively together with the budgetary controls as the current fiscal situation may dictate.

The Commission feels that constitutional status was conferred on the Game and Fresh Water Fish Commission by popular vote and would resist any attempts to change the status of the Game and Fresh Water Fish Commission. In view of the rapidly expanding requirements for hunting and fishing throughout the State, it will be necessary for the Game and Fresh Water Fish Commission to coordinate and correlate its program with those of other agencies but the dilution of existing authority granted this Commission is contrary to existing policy.



A. D. ALDRICH
Director



Appointed director of the Florida Game and Fresh Water Fish Commission April 1955, A. D. Aldrich has a record of service in the fields of game and fish management, and conservation administration dating back to 1922.

Aldrich has been active in various fields involving outdoor recreation, including active membership in many technical and professional organizations. He served on the Advisory Council of the Outdoor Recreation Resources Review Commission, and is presently a member of the Citizen's Committee for the O.R.R.R.C.

Mr. Aldrich served on the advisory committee to the U.S. Forest Service on "wildlife use of the National Forests."

Since assuming duties as Director in Florida he has been active in the broad aspects of conservation through such groups as the Audubon Society, National Wildlife Federation, Izaak Walton League, and youth conservation education programs.

Mr. Aldrich firmly believes outdoor recreation in its broad application is necessary and essential to the physical and spiritual welfare of all citizens as well as to the general economy of Florida.

TABLE OF CONTENTS

Administration	4
Fiscal Division	6
Fisheries Division	10
Game Management Division	14
Communications Division	18
Law Enforcement	19
Information-Education	20
Statistical Summary	22

STATE OF FLORIDA
FARRIS BRYANT, Governor

GAME & FRESH WATER FISH COMMISSION A. D. ALDRICH, Director

BIENNIAL REPORT
June 30, 1964

E. L. Madill, Chairman, Dade City

Marcus Milam, Gainesville

Ronald Wise, DeFuniak Springs

W. T. McBroom, Miami

K. K. Kennedy, Ocala

DR. O. E. FRYE, JR.
Assistant
Director



Dr. O. E. Frye, Jr., has served as Assistant Director of the Florida Game and Fresh Water Fish Commission since 1951. He first joined the Commission as a bobwhite quail research technician on January 14, 1946, and has since rendered service in many capacities and positions.

Dr. Frye is especially noted for organizing and putting into effect a progressive game management program for the Commission, with a subsequent improvement in hunting success for the Florida hunter. He has written numerous technical and non-technical articles about wildlife and game management programs for many different publications.

During recent years, Dr. Frye has been particularly active in a program to improve Commission employee standards and performance.

The Commission

Administration

THE FLORIDA Game and Fresh Water Fish Commission was created by a Constitutional Amendment passed at the general election of 1942, and becoming effective January 1, 1943. Under this amendment, there is vested in the Commission all regulatory and management authority for birds, game, fresh water fish, fur-bearing animals, reptiles and amphibians.

The Commission consists of five Commissioners—one of whom is appointed by the Governor from each of the five Congressional Districts of Florida that existed as of January 1, 1941. Such appointments are for terms of five years, and are staggered so one appointment falls due each year.

The overall administration of the Game and Fresh Water Fish Commission is delegated by the Commission to a Director who is appointed by and serves at the pleasure of the five-man Commission.

Assisting the Director, and immediately under his supervision, are an Assistant Director, a Secretary to the Commission, personnel working on special assignments such as special investigators, and all Staff Officers.

Staff Officers of the Commission consist of the Chiefs of Fiscal, Game Management, Fisheries, Information and Education, Communications, Aviation, and the Magazine Editor and the five Regional Managers.

The Director is immediately responsible to the Commission. All Chiefs of Divisions, or Staff Officers, are, on the other hand, responsible to the Director. Division personnel are, of course, responsible to their Staff Officers.

Thus, when a policy is set by the Commission, it is administered by the Director through his Staff Officers and their personnel.

Under this arrangement, it is the Staff Officers' duty not only to attend to their particular administrative duties, but also to keep the Director, and through him the Commission itself, fully informed as to all important activities in all administrative branches.

Prior to 1951, all Game Commission programs were organized and put into effect from one statewide office in Tallahassee. This resulted in a cumbersome procedure that resulted in a loss of vital contact with personnel working in the field, and the local problems with which they were constantly confronted. Staff Officers in the Tallahassee main office were often isolated, not only from their own personnel, but also from the

sportsmen and general public of the State of Florida.

In an effort to overcome this operational handicap, the Administrative set-up was decentralized to attain closer contact with field problems and personnel.

To accomplish this, Game Commission Regional offices were established in strategically located spots throughout the state. Five Regions, and offices, were located in Northwest Florida, Northeast Florida, Central Florida, South Florida and Everglades Florida, with headquarters now in Panama City, Lake City, Ocala, Lakeland and West Palm Beach. Permanent headquarters buildings have been constructed at all of these sites.

Each Region was placed under a Regional Manager, responsible to the Commission's Director and Assistant Director. The Regional Managers are directly responsible for all activities within the geographical area composing their Region. These include all work and personnel in law enforcement, communications, game and fish management, aviation, information and education, and budgetary matters.

In order to make this operation workable, all activities of a technical nature must be supervised jointly by the Regional Manager and the Division Chief or Staff Officer of the appropriate function.

Thus, the Regional Manager, and his personnel, are assisted, at the upper level, by various Staff Officers. All state-wide programs set into effect by the Commission are organized and coordinated, with the cooperation of the Regional Managers and their personnel, by the Division Chiefs. It is therefore possible to put any overall program into immediate effect in all points of the state, with no discrepancies in policy or administration. A state-wide program is thereby operated exactly the same in every point of the state.

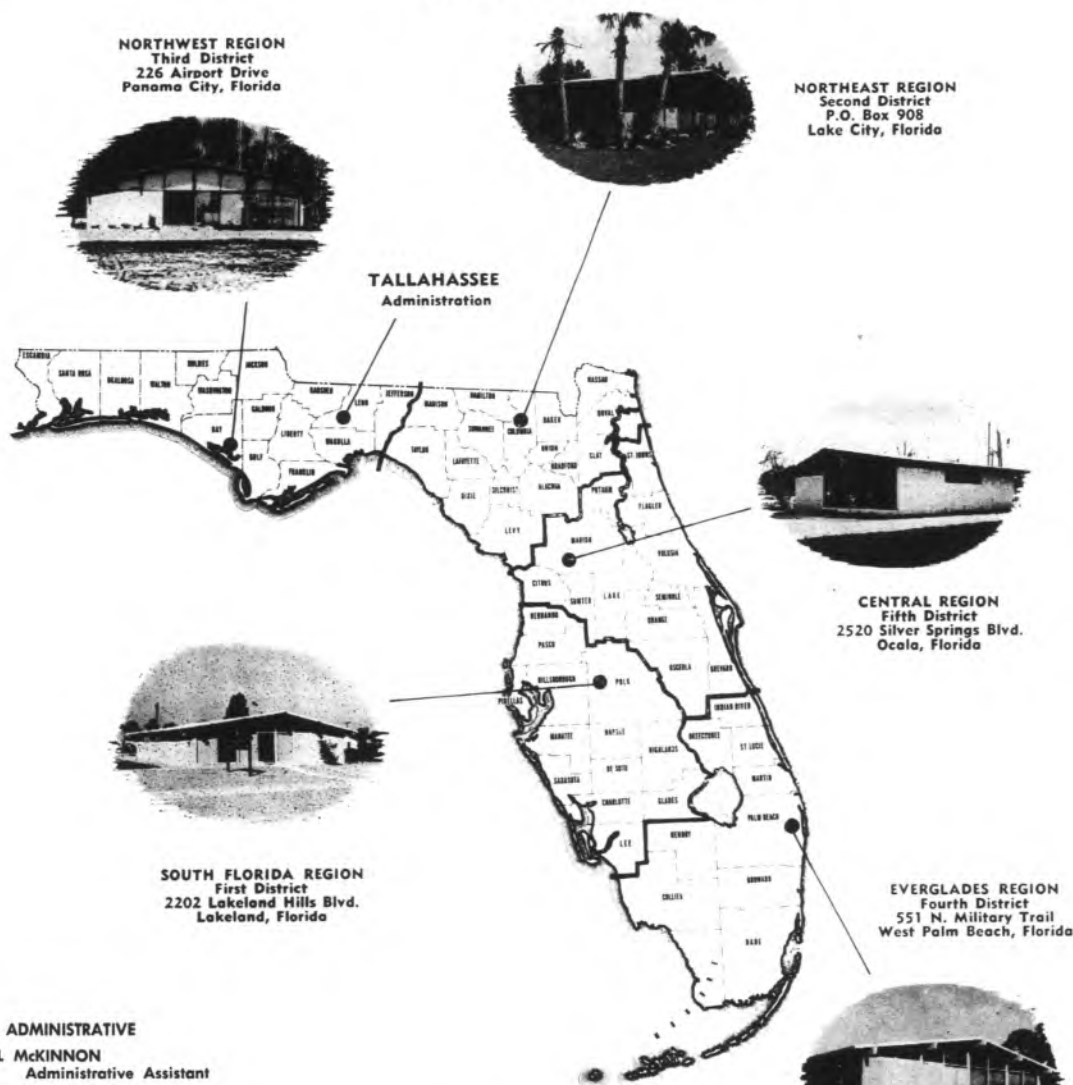
The close cooperation between the Director, the Assistant Director, the Division Chiefs and the Regional Managers is the most important item in the entire Administrative set-up.

Answerable to the various Staff Officers are additional sub-supervisory personnel. To the Chief of Fiscal is delegated responsibility for the State Property Officer, and Bookkeeping and Auditing personnel. The Game and Fish Management Chiefs are responsible for the leaders of Federal and Statewide Projects, such as the hyacinth control program, wildlife management areas, deer and turkey restoration, and water fowl and mourn-

ing dove research and management projects. The Information and Education Chief is responsible for the Chief of Youth Education, Chief of Audio-Visual, Chief of Conservation Extension, and the five Regional Information Officers. Regional Managers are responsible for regional fish and game and education officers, and area supervisors.

Beyond assisting the Director in these vital tasks, the Assistant Director customarily also handles details such as Personnel employment, training and qualifications, as well as revisions of the Wildlife Code Book rules and regulations, and certain legal affairs. He does these things as a portion of his responsibility to the Director.

REGIONAL OFFICES



ADMINISTRATIVE

JOEL McKINNON
Administrative Assistant

JOHN WOODS, Chief
Fish Management Division

H. E. WALLACE, Chief
Game Management Division

JAMES FLOYD, Chief
Information-Education Division

RHETT McMILLIAN, Chief
Communications Division

REGIONAL MANAGERS

J. O. BROWN, Mgr.
South Florida Region

BRANTLEY GOODSON, Mgr.
Northeast Florida Region

JOHN T. BROWN, Mgr.
Northwest Florida Region

LOUIS F. GAINES, Mgr.
Everglades Region

J. W. BICKERSTAFF, Mgr.
Central Florida Region

The Sportsman's

1962-1964

Fiscal Report



THE FISCAL DIVISION is one of five major operational divisions of the Florida Game and Fresh Water Fish Commission. This division has many complex tasks and responsibilities in complying with the many approved statewide fresh water fishing and hunting conservation programs within the revenue available under the State Game Fund. All revenues are anticipated prior to the beginning of each fiscal year, for this Commission is classified as a self-sustaining agency. This means all expenditures must be governed in proportion to revenue income, and in compliance with laws set forth by Florida Statutes.

There are approximately forty-five sources of revenue; the major source being the sale of sport fishing and hunting licenses. These licenses are distributed to the County Judges' office by the fiscal division and monthly sales reports are submitted to the Game and Fresh Water Fish Commission. This division issues all commercial licenses, audits all invoices, records arrest fees, retains records on insurance, and handles administration of property and property records and controls.

During the 1962-63 fiscal year the fiscal division installed additional IBM equipment as a means of furnishing up-to-date financial data on commission activities. This has proven beneficial not only to the fiscal division, but to administration, game, fish, and information and education divisions as well.

By **JOEL MCKINNON**

Chief, Fiscal Division

Revenue Facts

As stated the major source of revenue is derived from the sale of sport fishing and hunting licenses. These licenses are sold by the County Judge or their duly appointed sub-agents over the state. Each County Judge receives a fee of 25c for each license sold less than \$3.00, and 50c for each license sold costing \$3.00 or more. The duly authorized and appointed sub-agent is allowed to charge an additional 25c fee over the cost of the license and said fee is retained by the sub-agent. This charge was allowed by law passed by the legislature during this biennium. With the increase in the availability of sport licenses an increase in sales have resulted, thus making it beneficial not only to the commission, but to the counties as well. The Game and Fresh Water Fish Commission has no jurisdiction over the appointment of sub-agents and the accountability of all licenses in the county is the responsibility of the judge.

You can readily understand the necessity for

Statistical Summaries Pages 22-24

additional IBM equipment since the receipts during the 1962-64 biennium increased more than \$462,458.00, or an average of \$231,229.00 per year. Not only was there a large increase in revenue, but in expenditures as well, amounting to \$409,286.00, or an average of \$204,643.00 per year. The major increase in revenue was derived from sale of sport licenses, with fishing licenses showing an increase of over \$379,332.00 and hunting an increase of more than \$250,323.00

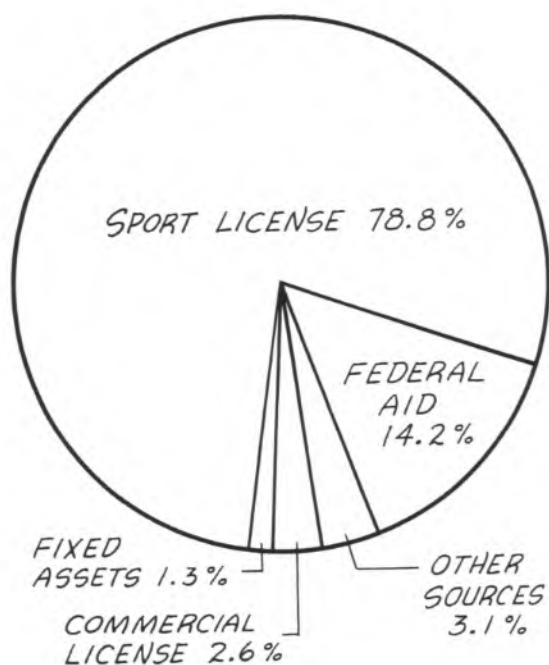
In determining the increase in fishing licenses, we note there was a decrease of more than \$26,000.00 in resident state license, but an increase of \$33,465.00 in non-resident state license. It is also noted that the cost of the non-resident license was changed from \$10.00 to \$7.50 at the beginning of our 1961-62 fiscal year. Thus, with the decrease in the cost of the license, the result has shown an increase in number and revenue which indicates that the reduction was received favorably by non-residents who desired to take the opportunity of enjoying the fine fishing facilities available over the state.

There was also another change in the fishing license during the 1961-62 fiscal year. The non-resident 3-day license, which during 1960-61 sold for \$1.00, whereas in 1961-62 was changed to five

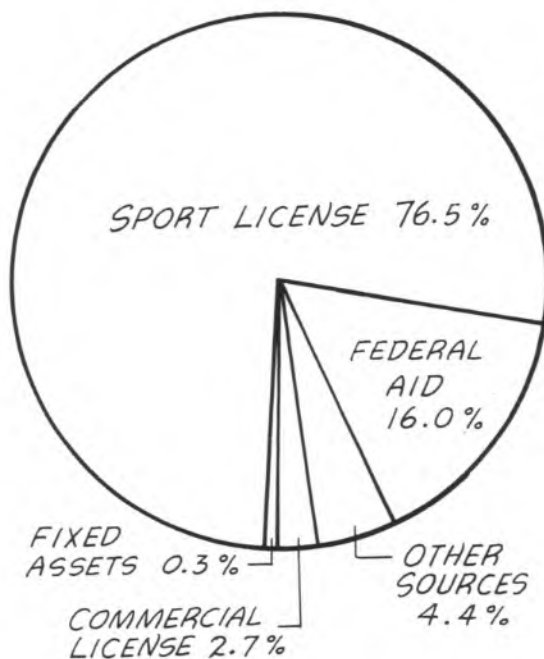
days at a cost of \$2.00. This resulted in an increase in revenue of more than \$11,273.00.

The commission is endeavoring to establish fish management areas comparable to game management areas as a means of increasing the interest of the sport fisherman for resident as well as non-resident.

The increase in our hunting license sales also reflected an increase in other licenses available to the sportsman such as the state hunting permit, dove permit and the hunting preserve license. During the past biennium there was an increase of \$65,000.00 in the sale of state hunting permits, \$20,000.00 increase in dove permits and more than a \$1,400.00 increase in the hunting preserve license. In order for these permits, state hunting or dove, to be used in any of the designated management areas or dove fields, a regular hunting license is required. The management areas and dove fields are actively pursued in an effort to increase the area for hunting and the interest of hunters both resident and non-resident. These have been accepted very favorably for during the 1962-64 biennium more than \$1,817,000.00 was received from the sale of hunting licenses both resident and non-resident.



1962 - 1963



1963 - 1964

Total Receipts by Classification

Other Income Source

The commercial license sales are handled by the Fiscal Division and include retail and wholesale fish dealers, game farm, commercial boat license and registration, guide and shooting preserve, etc., with an increase over the previous biennium.

Some of the other sources of revenue show a considerable increase as the result of commission personnel activities and one specific being court cost or arrest fees. During the past biennium, we show an increase of approximately \$20,000.00. This certainly shows an increased effort of enforcement personnel in the curtailment of game and fish violations. Not only is the fiscal division responsible for recording the arrest fees on each case, but for the billing of the respective counties each month for fees as well as the mileage.

Revenue from various type leases such as grazing, stump and oil showed an increase during the biennium with the oil lease as a new source of income.

Federal Aid Funds

Revenue is received from the Federal Government as reimbursement of expenditures resulting from commission activities under the Pittman-Robertson Act for game management, Dingell-Johnson Act for fish management and Corps of Engineers for hyacinth control. The income from

the game and fish management program is based partially on the number of license holders in the state for the previous year or years, as well as the state's total acreage, plus the number of approved game and fish management programs in operation. The amount of revenue under the hyacinth control program is based on funds released to the Corps of Engineers for noxious vegetation control work in Florida. Revenue derived from the three Federal Aid Programs totals approximately \$330,000.00 per year, although this amount changes each year, since it is based on factors as stated.

License Reports

The license reports received from the 67 counties relative to the sale of fishing and hunting license must be checked and balanced by this division. Every license printed must be accounted for, with all records verified by the State Auditing Department. All sport licenses are forwarded to the County Judges prior to the beginning of each fiscal year. He is responsible for all licenses assigned to him and accountable to the commission for sales and returned licenses.

Property Control

The purchase, sale and inventory of all commission property comes under the jurisdiction of the division property officer. The property officer records and assigns numbers to all equipment

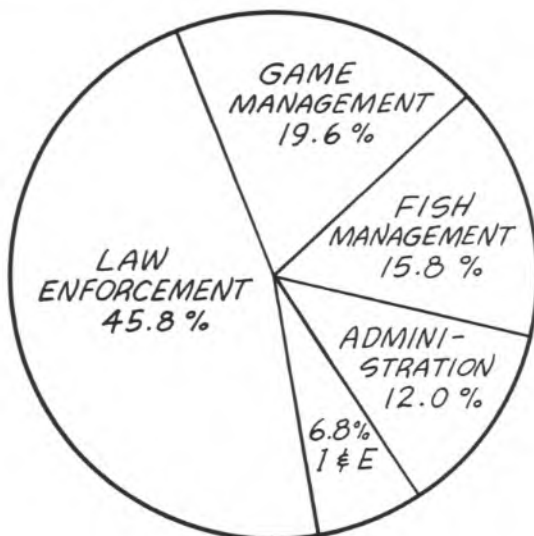
Total Receipts by Activity



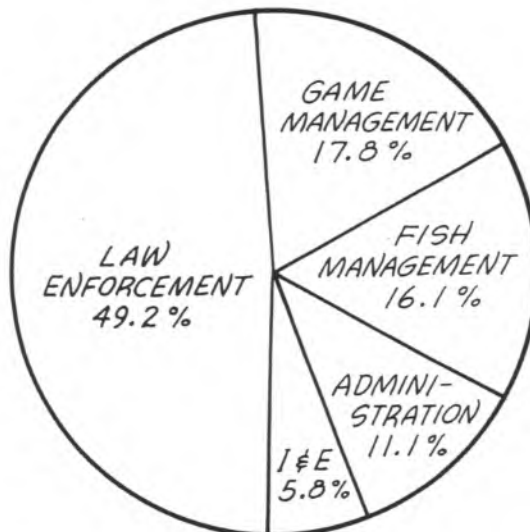
1962 - 1963



1963 - 1964



1962 - 1963



1963 - 1964

Total Disbursements by Activity

owned by the Commission, also to whom assigned along with transfers when they occur.

The property officer makes periodic inspection of all equipment and submits a full report of the condition along with recommendations for replacements.

An operational cost report is sent to the property officer monthly on all motor vehicles and outboard motors. This report enables the property officer to determine the cost of operation, such as miles per gallon, cost per mile, total cost of servicing and repairs, plus total time and miles driven since purchased.

The operational cost report also enables the property officer to determine the best price we should receive for the sale of this equipment on competitive bids. When the equipment is considered no longer serviceable the property officer recommends the sale and price we should receive.

The property officer draws up the specifications for the purchase of all new equipment and sees that the dealer complies with the specifications when it is delivered.

The value of our equipment in 1962-63 was \$1,177,350.00, whereas in 1963-64 it was valued at \$1,245,805.00.

Purchasing Procedures

A purchase order is required for each purchase in excess of \$25.00. Purchase orders relating to repairs may be issued by division chiefs or regional managers up to but not exceeding \$100.00.

All other purchase orders in excess of \$25.00 must be secured through the Fiscal Division after approval by division chiefs or regional managers. This is extremely important for proper distribution of Commission Funds and determining our encumbrances at any given date.

All payments are made by state warrants issued by the State Comptroller the same as all other state agencies and departments are required.

Budget Procedure

The Fiscal Division consults with each division chief and regional manager in preparing individual annual budgets prior to the start of the fiscal year to determine our state-wide need.

In compiling an overall state budget the fiscal division must be sure that the anticipated expense budget remains within the anticipated revenue.

The Fiscal Division must exercise full control to see that the rate of expenditures remains in proportion to the rate of revenue income during any specific time or period of the fiscal year.

The total revenue income during the 1962-64 biennium totaled \$5,604,891.00, whereas the expenditures exceeded \$5,559,065.00, with an average yearly increase of more than \$231,229.00 in revenue and \$204,643.00 in expenditures.

As soon as a state-wide budget is compiled on a state-wide need it is submitted to the Commissioners for their approval. Upon their final approval the budget is submitted to the State Comptroller's office for recording the budgetary figures to which our expenditures may be charged during the operating fiscal year.

For Better Fishing

FRESH WATER FISHING provides countless hours of outdoor recreation for both residents and visitors in the Sunshine State. People fish in Florida's fresh waters because they enjoy fishing, because they catch fish, because it provides them recreation and pleasure without a great investment, and because the fresh water fish of Florida are valued as table fare. A valuable resource such as this deserves the close attention of all concerned.

The Fisheries Division of the Florida Game and Fresh Water Fish Commission, in its endeavors to manage, restore, conserve and regulate the fresh water fish of this state, is indeed vitally concerned with this resource.

What follows is a resume of the various programs and projects which have contributed to the over-all accomplishments of the Fisheries Division during this biennium with descriptions of some of the typical activities carried out in each area of research or service.

A major accomplishment in Florida's fresh water fish management programs during the 1962-1964 biennium was the Legislative passage of the Fishing Improvement Program in 1963. Effective July 1, 1963, the annual cost of the resident fresh water fishing license was increased from \$2.00 to \$3.00, with the extra dollar specifically earmarked for designated improvement programs, as follows:

1. Increase boat ramp and access construction.
2. Construction of special Fish Management Areas.
3. Expanded pollution investigations and parasite controls.
4. Remedial measures to prevent the re-occurrence of fresh water fish kills.
5. Renovation of present fish hatchery facilities and the construction of new and modern fish hatcheries and fish management research centers.
6. Lake and pond construction with maximum fish management in large population centers.

All phases of the new Fishing Improvement Program were started during the 1963-1964 Fiscal Year; the most notable being the 31 established Fish Management Areas located in 19 counties by June 30, 1964.

Detailed reports of the Fishing Improvement Program will be continually available after July 1, 1964, and precise accounts of all projects will appear in the 1964-1966 Biennial Report.

Fisheries

Regional Services

The five men who bear the title "Regional Fishery Biologist," one in each of the Commission's five administrative regions, are, perhaps, collectively, the unsung backbone of the Fisheries Division.

Their work load and the variety of roles in which they find themselves cast from day to day has snowballed during the biennium.

With the accelerated interest and activity on the part of a public made aware of the needs in such areas as pond and lake creation and management, water pollution control, and concern with fishing in public as well as private waters, the growing number of calls for information and/or assistance from the regional technician has been both understandable and encouraging.

But as if response to these requests did not create full-time jobs in themselves, it is the business of regional biologists to make themselves available to investigate and submit recommendations on all dredging or pumping and filling activities around public waters, to answer inquiries to do with such things as fish identification, fish parasite problems in farm ponds, details on lake and pond construction and stocking, aquatic vegetation control, renovation of established waters, and even the occasional problem 'gator in the wading pool!

A regional biologist also has to be a fair country lawyer since he deals firsthand with the legal aspects of obtaining easements for proposed boat ramp sites and invariably spends many hours per year looking up property deeds and plats in the county courthouse in connection with questions of lake bottom ownership and the likes.

Regional men have unquestionably had more direct contacts with the fishing public during the biennium than any other members of the division. They have indeed become "institutions" in their spheres of influence and their work has meant more than 25,600 acres of improved fishing waters for the state.

Noxious Vegetation Control Program

Investigations in years past confirmed suspicions that large mats of the water hyacinth were detrimental to the game fish populations of a lake or river.

Drifting mats of hyacinths can cover spawning areas, the dangling roots sweeping muck and sand

Division

JOHN WOODS, Chief

through the beds. Sunlight is completely shut off, causing the death of desirable underwater vegetation which plays host to the smaller organisms which are essential to a healthy fish population.

While agencies other than the Game and Fresh Water Fish Commission have been interested in controlling and progressively eradicating hyacinth in the interests of navigation, flood control, and mosquito control, the Commission has been dedicated to clearing the pesky plants from public waters in order to open more of same to fishing and to improve fishing in those waters.

In application a chemical is sprayed, under pump pressure, usually from an air-boat or outboard boat, sometimes from an airplane, on the offending rafts of hyacinth.

The chemical, 2,4-D, is a hormone type-herbicide which, when absorbed by a plant, literally forces the plant to grow itself to death. The chemical is relatively inexpensive, easy to apply, and is non-injurious to humans, livestock, fish, and fowl if used as directed. Two primary types are offered—the amine and the ester. Both have their uses in hyacinth control.

With either the amine or the ester 2,4-D, the standard, most-effective mixture is 1 to 100. To treat one acre of hyacinths, it takes $\frac{1}{2}$ gallon of the ester type, $\frac{3}{4}$ gallon of the amine type. Average cost per acre is about \$8.03 (\$2.99 for chemicals, \$5.04 for operational expense).

The battle continues. New herbicides and new techniques are constantly being tested, not only against the hyacinth, but against the whole group of plants labeled "noxious." This includes alligator weed, water lettuce, cattail, maiden cane, water willow, button bush, and coontail, to name a few.

The noxious vegetation program covers the entire state. Areas on watersheds under treatment (or completed) are: Fisheating Creek, Caloosahatchee River, Harney Pond Creek, Indian Prairie Creek, Taylor Creek, Lake Istokpoqa, Peace River, Myakka River, Manatee River, Little Manatee River, Alafia River, Hillsborough River, Upper St. Johns River, Withlacoochee River, Oklawaha River, Santa Fe River, Suwannee River, Aucilla River, Wacissa River, Ochlockonee River and the Apalachicola River.

Hatchery Facilities

Hatchery-raised fish in Florida are produced and distributed from two hatcheries operated by the Fisheries Division. The Holt Hatchery in West Florida produces and distributes bass, bluegill, and shellcracker. The hatchery near Winter Haven deals only with bass production.

Additional fish of each species are obtained from the hatchery operated by the U. S. Fish and Wildlife Service at Welaka, Florida for filling stocking orders in every region of the state.

Deliveries of hatchery produced fingerlings result when restocking of totally renovated bodies of water is necessary and when lake or pond owners have applied for assistance and have had their waters checked by regional fishery biologists, who have then ordered the correct numbers of each species required for bringing the populations into more favorable balance.

Stocking as a fish management tool is most valuable when the waters are "new" and unpopulated, as is the case with freshly built lakes or ponds and with totally renovated bodies of water, that is, those in which the existing fish populations have been eliminated through chemical treatment or severe drawdown or both. Personnel from these facilities stocked more than 5 million fingerling bass, bluegills, shellcrackers and channel catfish during biennium.

Federal Aid to Fisheries

Next time you walk out of a tackle shop clutching that reel you've always yearned for, or the latest lure that you can't fish without, take a moment to consider that your purchase has helped the cause of sport fishing throughout the entire United States.

For on every dollar spent on tackle and accessories, the Federal government collects an eleven-cent excise tax. Money in the Federal kitty is then apportioned to the states, the amount determined by a formula which compares the number of license buyers, in a particular state to the total in all states, and the area of that state to the area of the whole country.

River Basins—Fishery Investigations

F-8-R

This D-J project evaluates the activities of state and federal water control agencies which

may be detrimental to Florida's sport fishing. Suggestions are made to these agencies whenever it appears as though their plans may prove detrimental. Nine significant reports have been prepared to date.

The project boundaries include all or part of seventeen central and south Florida counties, and some of Florida's major rivers and lakes; i.e., the Kissimmee River, Lake Okeechobee, Caloosahatchee, and a major portion of the St. Johns River.

Everglades Fishery

Impoundment Investigations

F-16-R

The Everglades Fishery Impoundment Study has been primarily concerned with research in the interest of adding to the total knowledge of the Florida sport fishery.

Chief among its accomplishments has been the study of the varying rates of growth of the Florida largemouth bass and the Northern largemouth bass. Both fishes are found in Florida but the range of the Florida bass excludes him from the Suwannee River drainage and westward.

The southern, or Florida form can be distinguished by having smaller scales, higher scale counts, larger size, and in some instances by coloration.

This investigation was designed primarily to determine the seasonal growth of the largemouth bass in South Florida and to relate its growth to the ecological changes in the area.

This Federal Aid in Fish Restoration Act of August 9, 1950 (better known as the Dingell-Johnson Act), is currently supplying about \$128,000 a year to Florida, money which plays a vital role in helping to maintain and to improve our state's famous fishing.

When a needed project has been proposed, planned, and given the green light, the Florida Game and Fresh Water Fish Commission carries out the plan, spending its own funds. The state then submits reimbursement claims for 75% of the cost of the project, either periodically or at completion of the work. The remaining 25% of the project expenditure is financed out of Commission funds collected from fishing license sales.

All equipment, lands, and structures become the property of the state. All project workers are hired by the Commission and are state employees.

These projects were among those active in Florida during the biennium:

Public Boat Ramp

F-13-D

This project continues to be one of the best received of all Federal Aid projects.

The needs are great in this area of activity and the Boat Ramp Project is proving to be a valuable tool in that it assures the rights of fishermen and boaters to access to our public waters.

Easements to ramp sites are acquired through arrangements with private citizens, cities, and counties.

The selection of sites is governed by the needs of the particular body of water for access. Often there are bodies of water or long stretches of river or stream totally without access facilities. These are given primary consideration, with final site selection being dependent upon satisfactory lease or purchase arrangements and favorable geographical locations for the proposed ramps.

The boat launching ramps completed during the biennium reflects the work required to make available 16,937 additional acres of pond, lake, or reservoir waters and 190 additional miles of rivers, streams, or creeks.

Anadromous Fish Study

F-10-R

Salt-water species which spawn in fresh water are of considerable interest to sport-fishermen in Florida. If you have thrilled to the antics of a St. Johns river shad, or to the power of a striped bass from the Jim Woodruff Dam waters, you can understand the enthusiasm behind this project.

At present, sport fishing for the American shad (*Alosa sapidissima*) on the St. Johns River has developed to a high degree thanks to the efforts of a Central Florida newspaper. While it could compare favorably, the shad fishing in the St. Mary's River and the Apalachicola River drainage system has not yet been promoted.

Striped Bass (*Morone saxatilis*), while appearing to be in the southern extreme of their range in Florida, do occur in abundance in the Apalachicola drainage, and the sport-fishing for this prize fish is slowly developing.

A Federal Aid project sponsored by Dingell-Johnson money, this work touches on the fish in Florida which are anadromous. These are the fish which normally spend their life in salt water but which come into fresh water streams and rivers to spawn. Like the sturgeon. Or the American or Alabama shad. Or the striped bass.

"He's unpredictable, temperamental, and can make you out a liar right quick," says Jimmy Barkuloo, speaking out on his favorite subject, the striped bass, and the prospects of hooking into one.

The goal of this project is to increase the stripers' numbers in Florida. And it is not as simple as it sounds. In many ways the striper is still a mystery fish—despite constant and dedicated prying into its life.

This fish is definitely worth promoting, and, thanks to your tackle and license purchases which help supply the Federal money for the research, it looks as though striper fishing in Florida will be an ever-increasing reality.

The American shad reach sexual maturity between the third and the fifth year, then head up the river to spawn, and, if in the St. Johns, to complete their life cycle, and die.

Fishing for shad in that area of the St. Johns generally east of Sanford has reached a height of sophistication. February through March is the best time to fish for them, with prime-time from mid-February through mid-March.

On Florida's West Coast from the Suwannee up through the Panhandle, shad are almost entirely neglected. Project personnel have found them in numbers in most of the major drainages, such as; the Suwannee River Drainage, where he has netted them at the mouths of the Santa Fe, Dead Bay and Withlacoochee rivers, at the Bellville Bridge on the Withlacoochee, at Alligator Pass, and at Fowler Bluff.

In the Yellow River Drainage, shad have been netted at the mouth of Shoal River and 1/2 mile below the Oakgrove Bridge on Highway #2.

The mouth of Holmes Creek in the Choctawhatchee River Drainage has yielded some young shad but the spawning area of the adults has not yet been located.

Shad were numerous in the creeks of the Econfin-Bear Creek Drainage system before the Deer Point Dam was constructed in November, 1961. Barkuloo predicts that stretch of water immediately below the dam will have a good potential.

The best places to find shad on the West Coast and Panhandle is in the Apalachicola River Drainage, especially at the tailrace of the Jim Woodruff Dam, and below the dam at the Dead Lakes and junction of the Chipola River and Chipola Cut-off 1/2 mile south of the Dead Lakes Dam.

Project personnel have netted adults from all the above-mentioned areas between February and

May with the biggest roe shad taken between February and March.

These shad are the Alabama shad, thought by some to be a separate species, by others to be a variety of the American shad.

Lake Management

F-12-D

When a lake or river, vital to the economy and recreation of a community, develops a pattern of poor fishing, management methods are frequently applied to restore the lake to its former productivity and also to show the public how these management practices can be of direct benefit to the people in the community.

Deer Point Lake was created by the impoundment of a brackish water area of North Bay, in Bay County. The new lake has an area of approximately 5000 acres and a 220 mile shoreline.

After impoundment the lake changed from brackish to strictly fresh water in a matter of months, being fed by four sizable natural streams.

The dam was constructed by the county but the lake is under the joint management of the Game and Fresh Water Fish Commission and the Board of County Commissioners for Bay County.

Fishery Management Research

F-14-R

Dingell-Johnson money was granted Florida for Fish Management Research. In this multifaceted project are clumped all the problems which, when solved, will improve the fish and the fishing within our state.

By far the most promising of the research efforts under this project is the evaluation of the Nile bream, *tilapia nilotica* to biologists, as a catchable food fish in Florida.

Elaborate plans have been made for controlled experiments in reclaimed phosphate pits in the Tampa-St. Petersburg area. Total water acreage will be about 505 acres which will be sufficient space in which to find most of the answers about this potentially important imported fish.

Game Management Division

H. E. WALLACE, Chief

ACTIVITY OF THE Game Management Division during the 1962-64 biennium was largely concerned with the operation of established projects.

Important studies and investigations dealt with wildlife resources, habitat changes, and land use in connection with the Central and Southern Florida Control Project; studies of quail, dove, deer, turkey, waterfowl, squirrel, and frog; land management, browse, population, harvest, and inventory studies.

During the biennium, the game management division engaged in the following investigations cooperatively with other states and agencies: Southeastern Deer Disease Study, Southeastern Statistical Project, Atlantic Waterfowl Council, Site Preparation Studies (one with State Forest Service, one with U. S. Forest Service), U. S. Forest Service Food Plant Study, and Fire Ant Study.

Development and habitat improvement again received the major share of Federal Aid funds. These activities were largely confined to the management areas, and involved food plots, controlled burning, clearing, and maintenance and construction of facilities. Turkey trappings at Fisheating Creek, hunt operations, and deer trapping were done with state funds.

Tables 1 through 4 succinctly depict the major aspects of Florida's Pittman-Robertson program. Table 1 presents the state's P-R apportionments and assignment of funds during fiscal years 1963, 1964, and 1965 to the primary categories. Tables 2 and 3 list the wildlife management areas oper-

ated during 1962-64 hunting seasons. Tables 4 and 5 present the projects' activities during the past year with individual estimated costs.

Federal Aid Coordination

W-13-C

This project is designed to coordinate the complex statewide restoration activities which includes the administration of nine Federal Aid Projects operated at a cost averaging approximately \$400,000.00 per year. Project personnel includes 20 biologists, 20 project assistants and 11 secretaries. It is the responsibility of the Coordinator to see that the Federal Aid activities in the state are productive of results. The Coordinator is responsible for furnishing required reports on the Federal Aid program as well as being responsible for the administration of all projects.

Habitat Restoration for Farm Game

W-15-D

The first part of this project, as the title suggests, selected, distributed and evaluated quail food planting material. The second part coordinated Commission Game Management Activities with National agricultural wildlife and public recreation programs. During the biennial, 325,700 pounds of Thumbergii Lespedeza, 18,405 pounds of Brown Top Millet, 15,100 pounds of Combine Peas, 5,886 pounds of Partridge Peas, 5,369 pounds Speckled Cow Peas, and 1,700 pounds of Common Lespedeza were distributed to landowners for field planting. Distribution of the material was largely

**Table 1. PITTMAN-ROBERTSON APPORTIONMENTS AND EXPENDITURES
DURING FISCAL YEARS 1962-63, 1963-64, AND 1964-65
WITH SUMMARY OF PROJECTS BY TYPE**

	1962-63		1963-64		1964-65	
	Amount*	Percent	Amount*	Percent	Amount*	Percent
Coordination.....	\$ 25,000.00	8.2	\$ 23,500.00	8.2	\$ 40,800.00	
Research	73,917.50	24.2	67,971.00	24.6	121,570.00	
Development	205,400.00	67.4	190,900.00	67.1	327,654.00	
Total	\$ 304,317.50		\$ 282,371.00		\$ 490,024.00	
Apportionment	\$ 202,205.93		\$ 248,215.44			

* Federal monies with matching State funds. These amounts are planned expenditures.

SUMMARY OF PROJECTS BY TYPE

	1962-63	1963-64	1964-65
Research	6	5	5
Development	4	2	2
Coordination	1	1	1
Land Acquisition	1	1	1

through the cooperation of the Soil Conservation Service.

Agricultural agencies with whom meetings were held and activities coordinated included the S.C.S., A.S.C.S., F.H.A., R.A.D., A.C.P., and the A.S.C.

Florida Waterfowl Survey W-19-R

Regardless of the fact that this project was without a leader throughout most of 1964, considerable investigative work was accomplished by the assistant leaders. During 1963, habitat studies included works on state management areas, experimental vegetation studies and plant introductions, and consultation work for private, state and federal personnel. Periodic waterfowl inventories were conducted on specified areas and the Canada goose fringe flock study was continued. Life history and population dynamics studies covered the major phases as outlined in the project work plans. In 1964, three cooperative projects concerning an evaluation of water control, bulkhead and fill were completed. These included establishing a new bulkhead line on the North River in St. Johns County by the Florida East Coast Hotel Company, the small watershed improvement on Mills Creek in Nassau County and the wildlife and economic potentials in flooding Payne's Prairie in Alachua County. The Florida waterfowl annual statewide aerial surveys continued to be a major function of this waterfowl project.

Wildlife Inventory, Harvest and Economic Survey W-33-R

This project measured and evaluated statewide hunting pressure, harvest, and sportsman opinions. This was accomplished by the use of mail surveys which reached four per cent of the licensed hunters annually. The results were extrapolated to estimate the total hunting pressure and harvest. Also evaluated under this project were kill data and pressure from state operated wildlife management areas. On a few selected hunt areas, port-a-punch cards were used to estimate man-hunt days and game harvest.

The cost of operating the managed hunts was determined each year in order to compare the relative economy of the various systems in use. The movement of hunters within the State was measured by utilizing hunter interview forms filled out by wildlife officers checking hunters in the field.

Management Area Development W-35-D

Over 65 per cent of Federal Aid funds was allotted annually to management area development activities on the 28 Florida Wildlife Management Areas. Each year's activities consisted of the maintenance and development of 767 food plots comprising approximately 1,313 acres; the maintenance and development of 868 miles of fencing; the maintenance of 76 buildings, 142 miles of roads, 1,047 miles of firebreaks, 121 turkey and

Table 2. WILDLIFE MANAGEMENT AREAS OPERATED DURING THE
1962-63 HUNTING SEASON

Area	Open to Hunting	Closed to Hunting	Ownership	County Location
1. Eglin Air Force Reservation	390,000	70,000	U.S. Air Force	Santa Rosa, Walton
2. Blackwater	85,000		Fla. Forest Service	Santa Rosa, Okaloosa
3. Roy S. Gaskin	118,300		Private	Gulf, Bay, Calhoun
4. Liberty	133,120		U.S. Forest Service	Liberty
5. Aucilla	110,000		Private	Wakulla, Taylor, Jefferson
6. Steinhatchee	206,500	18,500	Private	Dixie, Lafayette
7. Osceola	92,000		U.S. Forest Service	Columbia, Baker
8. Lake Butler	89,000	7,000	Private	Union, Baker, Columbia
9. Gulf Hammock	100,000	20,000	Private	Levy
10. Ocala	203,680	46,280	U.S. Forest Service	Marion, Putnam, Lake
11. Tomoka	90,000	5,000	Private	Volusia
12. Citrus	41,000		Fla. Forest Service	Citrus
13. Farmton	60,000		Private	Volusia
14. Croom	17,000		Fla. Forest Service	Hernando
15. Richloam	63,000		Fla. Forest Service	Hernando, Pasco, Sumter
16. Avon Park	108,000		U.S. Air Force	Polk, Highlands
17. Okeechobee	16,000		Private	Okeechobee
18. Fisheating Creek	100,000	175,000	Private	Glades
19. Cecil M. Webb		62,000	Game & Fish Commission	Charlotte
20. J. W. Corbett	90,000		Game & Fish Commission	Palm Beach
21. Lee	40,000		Private	Lee
22. Everglades	725,300		Central & Southern Fla. Flood Control District	Palm Beach, Dade, Broward
23. Apalachee	6,000	1,000	U.S. Corps Engineers	Jackson
24. Camp Blanding	60,000	10,000	State Armory Board	Clay
25. Leon-Wakulla	67,000		U.S. Forest Service	Leon, Wakulla
26. Guano River	10,000		Private	St. Johns
27. Devil's Garden	40,000		Private	Hendry

400 quail feeders; assisting in the controlled burning of approximately 159,600 acres of forest land; the posting and maintenance of over 8,152 signs and boundary markers; plus the repair and building of numerous cattle gaps and gates, the building of dams, dikes, levees, canals, and channels, the planting of 100 acres of trees as well as the control of noxious vegetation.

Management Area Research W-41-R

Statewide wildlife research projects during the past biennial measured the effects on vegetation of such land use practices as timber stand improvement, pine site preparation, controlled burning, drainage, discing, fertilizing, pine planting, bulldozing, and cattle grazing; censused annual mast abundances of acorns and palmetto berries; investigated wildlife disease problems (primarily deer) under a cooperative agreement with the Southeastern Wildlife Disease Study Center located at Athens, Georgia; conducted investigations on deer, turkey, quail and dove populations; and investigated the economic importance of the non-game species armadillo, alligator, otter, and bobcat. These studies involved six work plans, 11 jobs and 34 separate procedures.

Cooperative Statistical Project FW-1-R

This is a cooperative project between the Game Management Division and the North Carolina State Computer Center. This Institute advised

the Game Management Division on the techniques and procedures to use in analyzing the Annual Mail Survey Analysis (hunting pressure and hunter game kill success), and in analyzing dove banding data.

River Basin Studies FW-2-R

This study investigated the potential and actual effects that drainage and channeling, by agencies such as the Soil Conservation Service and the Central and Southern Florida Flood Control, had on fish and wildlife habitat. Following initial investigation recommendations were made to the construction agencies involved outlining the findings and point of view of the Commission.

General Game Management

An expanded trapping program on wild hogs, turkey and deer, along with the raising and re-leasing of the exotic game birds Iranian Pheasants, Jungle Fowl, and Black Frankolins constituted the major portions of non-Federal Aid activities engaged in during the past biennial. A total of 1,168 turkeys, 486 deer (211 introduced from out of state), and over 1,000 hogs have been released on wildlife management areas throughout the State. The exotic game birds were investigated to determine their ability to adjust themselves to Florida environment and increase their numbers to the point where a shootable surplus becomes available. These studies so far have proven inconclusive.

**Table 3. WILDLIFE MANAGEMENT AREAS OPERATED DURING THE
1963-64 HUNTING SEASON**

Area	Open to Hunting	Closed to Hunting	Ownership	County Location
1. Eglin Air Force Reservation	390,000	70,000	U.S. Air Force	Santa Rosa, Walton
2. Blackwater	85,000		Fla. Forest Service	Santa Rosa and Okaloosa
3. Roy S. Gaskin	118,300		Private	Gulf, Bay, Calhoun
4. Liberty	133,120		U.S. Forest Service	Liberty
5. Aucilla	110,000		Private	Wakulla, Taylor, Jefferson
6. Steinhatchee	206,500	18,500	Private	Dixie, Lafayette
7. Osceola	92,000		U.S. Forest Service	Columbia, Baker
8. Lake Butler	89,000	7,000	Private	Union, Baker, Columbia
9. Gulf Hammock	100,000	20,000	Private	Levy
10. Ocala	203,680	46,200	U.S. Forest Service	Marion, Putnam, Lake
11. Tomoka	90,000	5,000	Private	Volusia
12. Citrus	41,000		Fla. Forest Service	Citrus
13. Farmton	60,000		Private	Volusia
14. Croom	17,000		Fla. Forest Service	Hernando
15. Richloam	63,000		Fla. Forest Service	Hernando, Pasco, Sumter
16. Avon Park	108,000		U.S. Air Force	Polk, Highlands
17. Okeechobee	16,000		Private	Okeechobee
18. Fisheating Creek	100,000	175,000	Private	Glades
19. Cecil M. Webb	62,000		Game & Fish Commission	Charlotte
20. J. W. Corbett	90,000		Game & Fish Commission	Palm Beach
21. Lee	40,000		Private	Lee
22. Everglades	725,300		Central & Southern Fla. Flood Control District	Palm Beach, Dade, Broward
23. Apalachee	6,000	1,000	U.S. Corps Engineers	Jackson
24. Camp Blanding	60,000	10,000	State Armory Board	Clay
25. Leon-Wakulla	67,000		U.S. Forest Service	Leon, Wakulla
26. Guano River	10,000		Private	St. Johns
27. Devil's Garden	40,000		Private	Hendry
28. Aerojet	40,000	25,000	Private	Dade

**Table 4. SUMMARY OF ACTIVE PITTMAN-ROBERTSON PROJECTS
OPERATED IN 1962-63**

Project	Name	Purpose	Estimated Total Cost
W-8-L	Charlotte County Game Management Area Acquisition	Exchange of land to consolidate Commission holdings	\$ None
W-13-C	Wildlife Management Coordination	To administer and supervise program	25,000.00
W-15-D	Habitat Restoration for Farm Game	To improve quail habitat	6,500.00
W-19-R	Florida Waterfowl Survey	To study waterfowl ecology	8,500.00
W-22-R	Mourning Dove Study	To study dove populations and migrations	6,900.00
W-33-R	Wildlife Inventory, Harvest and Economic Survey	To learn statewide harvest and hunting pressures	10,700.00
W-35-D	Management Area Development	To develop statewide management areas	150,000.00
W-41-R	Management Area Research	To study game populations and make management recommendations	38,800.00
W-46-D	Woodruff Reservoir Development	To develop Apalachee Management Area	15,100.00
W-47-D	Guano River Development	To develop Guano Management Area	33,800.00
FW-1-R	Cooperative Statistical Project	Statistical aid in research projects by the Institute of Statistics at North Carolina State College	1,317.50
FW-2-R	River Basins Studies	To determine benefits to fish and wildlife from Flood Control lands, Corps of Engineers projects, and SCS watershed projects	7,700.00
			\$304,317.50

State Hunts

The Game Management Division supervised public hunting on 24 wildlife management areas (excluding four National Forest areas) comprising approximately 2,680,500 acres. Hunt activities included collecting biological information on deer and turkey, recording of kill data, administration of checking station personnel, and enforcement of hunting rules and regulations. Big game harvest figures from the State operated hunt areas during the past two seasons included 7,010 deer, 2,207 turkey, and 1,410 hogs.

Game Management personnel also supervised hunting on 25 public dove fields. These privately owned fields were leased to the Commission by the landowners only during the period of the dove

hunts. The landowners involved were, for the most part, happy to shift the responsibility of regulating hunting on their lands over to the Commission while the Commission in turn, benefited by being the agency instrumental in providing greater hunting opportunity to the license holder.

National Hunts

Personnel of the Game Management Division supervised hunt operations on the Ocala, Osceola, and Apalachicola National Forests. The number of acres open to public hunting was 495,800. A total of 1,783 deer and 156 turkey were harvested during the past two hunting seasons. The types of activities engaged in by Commission personnel on the National hunts were the same as for state hunts.

**Table 5. SUMMARY OF ACTIVE PITTMAN-ROBERTSON PROJECTS
OPERATED IN 1963-64**

Project	Name	Purpose	Estimated Total Cost
W-8-L	Charlotte County Game Management Area Acquisition	Exchange of land to consolidate Commission holdings	\$ None
W-13-C	Wildlife Management Coordination	To administer and supervise program	23,500.00
W-15-D	Habitat Restoration for Farm Game	To improve quail habitat	5,700.00
W-19-R	Florida Waterfowl Survey	To study waterfowl ecology	10,300.00
W-33-R	Wildlife Inventory, Harvest and Economic Survey	To learn statewide harvest and hunting pressures	10,700.00
W-35-D	Management Area Development	To develop statewide management areas	185,200.00
W-41-R	Management Area Research	To study game populations and make management recommendations	36,500.00
FW-1-R	Cooperative Statistical Project	Statistical aid in research projects by the Institute of Statistics at North Carolina State College	1,271.00
FW-2-R	River Basins	To determine benefits to fish and wildlife from Flood Control lands, Corps of Engineers projects, and SCS watershed projects	9,200.00
			\$282,371.00

Radio Communications

RHETT McMILLIAN, Chief

THE COMMUNICATIONS DIVISION was established in 1948 with a primary function of aiding the Commission's statewide law enforcement program. This complex radio system has proven valuable in many ways to the Commission's continuous efforts in achieving greater operational efficiency with consequent savings in time and money.

In addition to serving as a law enforcement tool, the Communications Division provides greater flexibility in the overall administrative activities throughout the state.

Headquarters for Communications is centrally located at New Smyrna, with all the necessary equipment required for the complex radio network operations. Here are kept accurate cost records for each radio unit, and the required stock of emergency parts and supplies. Operating manuals and signal cards prepared for Commission personnel are processed and distributed from the headquarters office.

The Communications system now consists of 302 mobile units, including airborne sets, and 38 base stations, including two at temporary sites. One is operated in cooperation with the South Florida Conservation District.

Base stations are located at New Smyrna, Keenansville, Lakeland, Safety Harbor, Myakka, Bermond, Okeechobee, West Palm Beach, Immokalee, Hollywood, Trail Center, Avon Park, Callahan, Copeland, Durbin, Big Cypress, Panama City, Bonifay, Wilma, Tallahassee, Perry, Cross City, Lake City, Starke, San Mateo, Williston, Ocala, Tomoka, Magnolia, Madison, Marianna, Milton, Niceville, Princeton, Ft. Pierce, Belle Glade, Leesburg and Brooksville.

Several antenna sites have been established with the Federal Civil Defense, and the system has played an important part in all disaster test alerts. The Chief of Communications is a member of the State Civil Defense Communications Committee.

In addition to the chief of communications, the Division staff consists of five technicians located at New Smyrna, Panama City, Lakeland, Lake City and West Palm Beach. Each technician maintains complete repair facilities and is responsible for the operation of an average of ten base and sixty mobile units.

The major projects completed during the 1962-64 biennium were the Northeast and Northwest Project which consisted of modifications and re-

visions of the system in order to improve communications in these areas of the state. Another major project, "Operation Five," was initiated to replace present "tube-type" equipment with the new transistorized equipment. The audio tape of the procedure manual is in the process of being revised and updated.

STATION LOCATIONS

Location	County
New Smyrna	Volusia
Keenansville	Osceola
Lakeland	Polk
Safety Harbor	Pinellas
Myakka	Sarasota
Bermond	Charlotte
Okeechobee	Okeechobee
West Palm Beach	West Palm Beach
Immokalee	Collier
Hollywood	Broward
Trail Center	Collier
Avon Park	Highlands
Callahan	Nassau
Copeland	Collier
Durbin	St. Johns
Big Cypress	Hendry
Panama City	Bay
Bonifay	Holmes
Wilma	Liberty
Tallahassee	Leon
Perry	Taylor
Cross City	Dixie
Lake City	Columbia
Starke	Bradford
San Mateo	Putnam
Williston	Levy
Ocala	Marion
Tomoka	Volusia
Magnolia	Orange
Madison	Madison
Marianna	Jackson
Milton	Santa Rosa
Niceville	Okaloosa
Princeton	Dade
Ft. Pierce	St. Lucia
Belle Glade	Palm Beach
Leesburg	Lake
Brooksville	Hernando

The Wildlife Officer

Law Enforcement

THE LAW ENFORCEMENT Division participates in all of the various phases of the program of the Game and Fresh Water Fish Commission but its primary responsibility is to insure public compliance with fish and wildlife laws based upon research findings and conditions of habitat. Such regulations establish the necessary limitations on the activities of the hunters and fishermen of the State so that adequate reproductive stocks of fish and wildlife may be maintained while providing equal opportunities to enjoy the harvest of the surplus. It may be said that this Division is the backbone of the Commission's activities and few of the programs would succeed without the aggressive and impartial enforcement of the fish and wildlife laws.

This Division is headed by a Chief of Law Enforcement whose responsibility is of staff level and who is expected to develop divisional policies and programs and to coordinate enforcement activities over the various sections of the State. He is assisted in this activity by an Assistant Chief, and enforcement activities are directed within each of the five administrative regions by a Regional Manager. In addition to enforcement activities, the regional manager also supervises the operations of other branches of Commission operations within his geographical area of jurisdiction. Within each region several Area Supervisors direct the activities of from 5 to 9 wildlife officers who are assigned to an area encompassing from 3 to 5 counties.

Florida's wildlife officers have the tremendous task of enforcing the game and fish laws applying to approximately 39,000,000 acres of land and water within the confines of the State of Florida. With the second largest woodland area in the United States, and with over 30,000 named freshwater lakes, countless rivers and streams, and 58,560 square miles of territory to patrol, the wildlife officers are faced with a task that is all-important and never ending.

The job of wildlife officer is essentially the same in all Regions of the State. The officers must, however, adapt their work procedure to fit local circumstances, such as geography, topography, population concentrations of wildlife and humans, and seasonal variations. With good transportation equipment, cars, trucks, jeeps, airboats, marsh buggies, horses, boats, motors, airplanes and effective radio communications, the wildlife officers effectively cover the entire state,

insofar as is humanly practicable under present budgetary requirements.

While in the field, the wildlife officer represents the authority, the responsibility, the duty and the potentiality of the entire Florida Game and Fresh Water Fish Commission. To the average fisherman and hunter, who has no other contact with the Commission, the Florida Wildlife Officer IS the Florida Game and Fresh Water Fish Commission.

But Law Enforcement, or the sole responsibility of enforcing the Game and Fish Laws, is not the wildlife officer's only duty. The officer is also expected to serve or assist in local game and fish management work, community service, special investigations and public appearances. The wildlife officer is expected to make suitable speeches before organized groups, maintain his equipment in good working order, assist in fair exhibits and special promotions, and make many appearances in court. He is also concerned with maintaining good relations between the sportsmen of the state and the Game and Fresh Water Fish Commission. And, since he has specialized transportation equipment, good radio communications and the necessary experience, the wildlife officer is often called upon for aid in search and rescue missions involving distressed persons.

During the biennium, officers of the Commission made 8,233 arrests for violation of fresh water fish and wildlife laws. As a result of the amendment of the boating laws, our officers were given joint responsibility in their enforcement and made 1,197 arrests for violations which were encountered while patrolling for the purpose of enforcing the laws relative to fresh water fish and wildlife. A comparison of the Commission's arrest record during the biennium of 1953-54 indicates that 4,607 prosecutions were filed by a force of officers approximately 15% greater than our present complement. At first view, present figures seem to indicate that a disdain for wildlife and fresh water fish laws has developed during the past decade but the ratio of violations with respect to the numbers of people checked by our officers remains extremely low. When Florida's increase in population during this period is considered, it becomes readily apparent that the numbers of persons turning to the outdoors has greatly increased. More careful selection, training and supervision of the wildlife officers today, along with better equipment, has resulted in a marked

increase in efficiency of the Commission's enforcement efforts. License violations continue to be the most common infraction and, while there is a tendency to view these to be least serious violations, they are in fact quite important, since such persons are failing to bear their fair share of the burden of financing Florida's conservation program. Increased illegal hunting of alligators as a result of growing demand for their hides became a major enforcement problem during this period and required significant portions of the wildlife officers' time and effort.

The Game and Fresh Water Fish Commission has an important place in the State's Civil Defense and Disaster team and the wildlife officers performed frequent duty in rescue, in hurricane or flood crises. A large group of our officers were assigned to special police duty by the Governor

to assist in maintaining order during the civil rights demonstrations at St. Augustine in the summer of 1964.

A new style uniform was designed and became the first complete uniform to be furnished by the Commission to both enforcement and other field personnel.

The changes in laws and in their interpretation by the courts has made training for new personnel, and refresher training for regular personnel, mandatory. New officers are given accelerated, but comprehensive, training in a school conducted by the Commission and frequent refresher periods of instruction are held at regional and area levels. Supervisory enforcement officers attended training schools on Supervision and Command conducted at the Florida Law Enforcement Academy in Tallahassee, during 1964.

Information and Education

JAMES FLOYD, Chief

IN GENERAL, the Information and Education section is charged with the responsibility of informing and educating the public to proper conservation methods and practices. It is vitally concerned with publicizing the activities and policies of the Florida Game and Fresh Water Fish Commission. It is always interested in maintaining good relations between the sportsmen and the Commission. It is, of course, interested in employee training and morale. It must, at all times, work in cooperation with all branches of the Commission in all fields, and it must attain continuous and complete contact with all Commission employees and programs. Essentially, the information and Education Division is a service department—offering its service to all persons connected with the Commission, and to all sportsmen and citizens of Florida and the United States.

To accomplish this duty, the Division uses many programs, methods and ways of informing and educating the interested public.

Operations

Operational procedures and policies of the Information and Education Division are outlined as follows:

By its nature, the Information and Education program carried on by the Florida Game and Fresh Water Fish Commission is both intricate and widely diversified.

In all, the Information and Education Division

is responsible for carrying on a total of 15 major interrelated programs that fall roughly into the five general classifications of Information, Education, Publicity, Public Relations and Internal Employee Training.

The 15 major programs that are carried on simultaneously are: Publications, Films and Film Libraries, News Releases, Fair Exhibits, Radio, Television, Newspapers, Photography, Public School Resource-Use Education, Lectures, Information Requests, Special Promotions, Organizations and Conventions, Junior Conservation Clubs and League, and Liaison work.

Each of these 15 major programs contains, of course, many minor and varied programs and projects.

In general, the Information and Education work is carried on two main levels: Out-of-State Information and Education, and Intra-State Information and Education. Of the two, the Intra-State work has always been considered the more important phase of the Commission's I&E work.

The Out-of-State I&E program is carried on primarily through the office in Tallahassee. In its essence, the theme of any programs designed for out-of-state dissemination is to publicize the great potentialities of fishing and hunting in Florida. Much of this work is involuntary in that it is done at specific requests from persons, concerns and states outside of Florida.

The Out-of-State work continues to be necessary and desirable just so long as the national

interest in Florida's fishing and hunting continues to grow so rapidly as the result of invaluable publicity received in countless national magazines, newspapers, books, television programs and motion pictures. The out-of-state work undoubtedly results in the arrival of many hundreds of out-of-state visitors—fishermen and hunters—and many prospective permanent residents.

The Intra-State work of the Information and Education Division is considered to be of most vital interest to the Florida Game and Fresh Water Fish Commission. This is because of the primary duty and responsibility of the Game Commission is to the Florida citizens who purchase licenses to fish and hunt within the state.

The I&E Division is primarily charged with the responsibility of informing and educating the general public as to the policies, the work programs, the game and fish laws and the management practices which are being set into motion by the Commission.

The I&E Division is not, and has never been considered to be, a propaganda machine. Nor is it the "brain" of the Commission. It serves, instead, as the "tongue" of the Commission, giving voice, in all possible ways, to the official policies and practices of the Commission. In order to do its job, the I&E Division is concerned with the true facts concerning Florida wildlife and its proper conservation.

It is the duty of the I&E Division to cooperate with and assist in every possible way all writers and editors so as to help them present complete facts about fish and wildlife.

In order to effect an efficient 15-point program on a state-wide basis the Staff Officer known as the Chief of Information and Education has the assistance, cooperation and advice of five Regional Information Officers. These Officers, located in each Region headquarters office of the Commission, are completely responsible for the proper conduct of complete information and education programs in the areas encompassed by the respective Regions.

Under the Regional administrative set-up, all state-wide informational or educational programs are organized and set into motion by the Tallahassee office. The programs are then carried out on a Regional, or local, basis by the Regional Officers.

Publications

The I&E Division cooperates with the staff of FLORIDA WILDLIFE Magazine who edits and produces the majority of pamphlets, booklets and brochures published for distribution by the Commission as an aid to properly inform and educate interested persons as to the importance of all wildlife and conservation responsibilities.

Films and Film Libraries

The Division maintains a film library at its Central Office. These films—mainly 16mm. color-sound—are available to interested groups for educational and instructional purposes. Both Commission-produced films, and films produced by outside interests, are utilized in the loan libraries.

News Releases

Statewide news releases are processed and distributed by the Tallahassee office. Region-wide news releases are processed and distributed by the Regional Information Office. News releases are one of the most important programs carried on by the I&E Division, for it is only through this medium that most newspapers, radio stations, television stations, editors, outdoor writers and interested sportsmen obtain authoritative information concerning current Commission policies, programs, activities, and rules and regulations.

Youth Conservation Education

The Conservation Education Extension Section, a phase of the over-all I&E operation, is concerned with teaching and training the youth of Florida in regard to the wise use of Florida's natural resources. This is accomplished through a program which embraces youth conservation clubs, and a summer conservation camping program.

Exhibits

Many exhibits are installed at conventions, assemblies and fairs throughout the state. All such exhibits feature official Commission policies and programs as themes. The exhibits are scheduled, constructed and exhibited through the initiative and resources of the respective Regional offices.

Radio

Radio activities were confined mainly to personal appearances by Regional Information Officers and personnel on local radio stations and tape-recorded programs.

Television

Regional Information Officers and personnel made personal appearances on numerous television programs. During a twelve-month period, the five Regional Information Officers made a total of 100 appearances on radio and television programs.

Lectures

All I&E Officers, as well as other employees of the Commission, are continuously available for public appearances and addresses before numerous public gatherings and organizations throughout the state.

Other Activities

Work done in handling information requests, special promotions, organizations and conventions, and public school resource-use education is a routine part of an I&E program. ●

Financial Statement

FLORIDA GAME AND FRESH WATER FISH COMMISSION

Financial Statement—July 1, 1962-June 30, 1964

Statement of Cash Receipts, Disbursements, and Balances

	1962-63		1963-64	
	Item Total	Source Total	Item Total	Source Total
Receipts:				
Beginning Cash Balance, July 1		\$ 68,380.26		\$ 70,132.76
Licenses Sold by County Judges	\$2,146,254.00		\$2,205,076.75	
Licenses Sold by State Office	70,438.70		76,907.20	
Revenue from Other Government Agencies	386,697.64		461,958.23	
Revenue from Use of Property	44,685.42		82,050.14	
Revenue from Sale of Fixed Assets	37,222.24		8,980.43	
Revenue from Publication of Magazine	31,376.07		36,759.72	
Revenue from Other Sources	7,643.65		8,841.80	
Transfer from Recreation Fund			20,000.00	
Transfer from Bldg. Fund			16,885.12	
Total Cash Receipts—Schedule "A"		2,724,317.72		2,917,459.39
Special Building Fund		1,791.52		21.56
Cancelled and Restored Warrants		83.15		24.32
County Judges Account		1,888.70		135.75
Total Revenue Available		\$2,796,461.35		\$2,987,773.78
Disbursements:				
Salaries	\$1,397,112.79		\$1,505,024.79	
Other Personal Services	70,143.55		68,806.27	
Advertising Florida Resources			47.30	
General Printing and Reproduction	98,672.29		71,886.27	
Repairs to Equipment	89,605.01		108,754.96	
Telephone, Telegraph, Postage	53,283.44		66,364.14	
Travel	113,893.53		102,711.39	
Other Contractual Services	68,510.04		43,443.46	
Office Materials and Supplies	13,548.69		17,181.08	
Motor Fuels and Lubricants	166,928.22		204,980.77	
Other Materials and Supplies	89,026.23		95,068.12	
Insurance and Surety Bonds	58,149.12		57,443.48	
Educational, Agricultural and Scientific Supplies	50,182.72		29,430.69	
Parts, Fittings & Maintenance Supplies	51,217.37		57,107.06	
Rental of Buildings and Equipment	44,239.44		59,898.40	
Other Current Charges	17,137.01		21,559.55	
Motor Vehicles	143,212.33		123,060.69	
Motors, Boats, & Trailers	13,560.37		20,579.51	
Buildings and Fixed Equipment	11,563.60		2,149.25	
Office Furniture and Equipment	3,394.43		9,119.24	
Other Capital Outlay	23,681.55		23,822.53	
Other Expenses	19,085.34		29,538.58	
Transfer to Federal Government	49,591.87		30,293.29	
Non-Operating Service Charge	79,139.15		85,916.15	
Total Disbursements—Schedule "B"		\$2,724,878.09		\$2,834,186.97
Adjustment Account		14.50		35.35
Building Construction and Furnishings		1,414.44		-0-
Total Disbursements		\$2,726,307.03		\$2,834,222.32
Ending Cash Balance		70,154.32		153,551.46
Less Special Building Fund Balance		21.56		21.56
Cash Balance Carried Forward June 30		\$ 70,132.76		\$ 153,529.90

Schedule A

	1962-63	1963-64		
	Item Total	Source Total	Item Total	Source Total
Sale of Sporting License				
Fishing	\$1,017,125.00		\$1,006,327.00	
Hunting	861,659.25		940,138.30	
Trapping	2,162.00		1,769.50	
U. S. Permits	1,200.00		1,466.00	
Alien Hunting	50.00		100.00	
State Hunting				
Permits	185,945.00		208,005.00	
Archery Permits	13,140.00		9,170.00	
Webb Permits	2,270.00		3,730.00	
Quail Permits	438.00		648.00	
Dove Permits	7,258.00		14,876.00	
Previous Years				
Permits	1,295.00		40.00	
Guano Hog Permits	646.00		560.00	
Total Sporting License		\$2,093,188.25		\$2,188,764.00
Sale of Commercial License				
Retail Fish Dealer	19,290.00		17,910.00	
Non-resident Retail				
Fish Dealer	400.00		200.00	
Wholesale Fish Dealer	3,350.00		3,500.00	
Non-Resident Whole-				
sale Fish Dealer	500.00		1,050.00	
Commercial Boats	13,072.50		12,928.20	
Previous Years Com-				
mmercial License	54.90		185.75	
Non-Resident Com-				
mmercial Boat	133.05		55.75	
Boat Registration				
Fees	2,741.25		2,868.50	
Nutra License	400.00		250.00	
Hunting Preserve	2,000.00		2,250.00	
Guide	320.00		260.00	
Game Farm	2,425.00		2,325.00	
Wholesale Fur Dealer				
and Agents	590.00		495.00	
Local Fur Dealer	90.00		80.00	
License to Exhibit				
Poisonous or Ven-				
omous Reptiles	70.00		65.00	
Total Commercial				
License		\$ 45,436.70		\$ 44,423.20
Other Sources				
Court Costs	45,362.73		52,690.02	
Miscellaneous				
Receipts	3,849.15		5,872.82	
Previous Years Li-				
cence Collected	78,067.75		48,796.75	
Federal Aid Hyacinth Control				
	104,608.05		51,200.69	
Dingell-Johnson	123,739.39		144,858.82	
Pittman-Robertson	112,987.47		213,208.70	
Sale of Magazine				
Subscriptions	29,928.10		35,104.07	
Sale of Magazine				
Single Copies	1,447.97		1,655.65	
Sale of Old				
Equipment	37,222.24		8,980.43	
Sale of Confiscated				
Materials and				
Equipment	3,794.50		3,058.98	
Charlotte County				
Grazing Lease				
Webb Area Marl				
Lease	10,553.65		11,165.50	
Palm Beach County				
Lease and				
Easement	10,000.00			
Stump Lease	22,297.37		22,455.74	
Miscellaneous Leases	1,834.40		853.90	
Oil Lease			37,575.00	
Total Other Sources		585,692.77		647,387.07
Total Receipts		\$2,724,317.72		\$2,880,574.27



Schedule B

	1962-63	1963-64
Item Total	Item Total	
Disbursements		
Salaries	\$1,397,112.79	\$1,505,024.79
Professional Fees and Consultation Services		
Other Personal Services	70,143.55	68,806.27
Advertising Florida Commission		47.30
Communication and Transmittal of Things	53,283.44	66,364.14
General Printing and Reproduction	98,672.29	71,886.27
Repairs and Maintenance	89,605.01	108,754.96
Travel	113,893.53	102,711.39
Utilities	13,855.85	17,095.24
Other Contractual Services	68,510.04	43,443.46
Clothing	14.16	382.60
Building and Construction Materials and Supplies	31.13	1,804.43
Coal, Fuel Oil	1,543.32	2,489.68
Educational, Medical, Scientific, and Agricultural		
Material and Supplies		Material and Supplies
Food Products	2,990.88	3,691.63
Maintenance Materials and Supplies	51,217.37	57,107.06
Motor Fuels and Lubricants	166,928.22	204,980.77
Office Materials and Supplies	13,548.69	17,181.08
Other Materials	89,026.23	95,068.12
Insurance	58,149.12	57,443.48
Pensions and Benefits	650.00	4,075.00
Rental of Buildings and Equipment	44,239.44	59,898.40
Other Current Charges and Obligations	17,137.01	21,559.55
Books	313.94	249.80
Fixed Capital Outlay	9,663.60	2,149.25
Educational, Medical, Scientific, and Agricultural		
Equipment	239.86	796.21
Motor Vehicles	143,212.33	123,060.69
Motors, Boats and Trailers	13,560.37	20,579.51
Other Motor Vehicles		
Office Furniture and Equipment	3,394.43	9,119.24
Other Structures and Improvements	1,900.00	
Other Capital Outlay	23,127.75	22,776.52
Distribution and Transfer to Other Funds	49,591.87	30,293.29
Service Charges General Revenue	79,139.15	85,916.15
Total	\$2,724,878.09	\$2,834,186.97

Schedule C
Disbursements by Departments

	1962-63		1963-64	
	Budget Total	Department Total	Budget Total	Department Total
Administration				
Salaries	\$ 33,930.17		\$ 38,091.00	
Other Personal Services	133.75		20.00	
General Expenses	4,824.49		4,508.00	
Capital Outlay	-0-	\$ 38,888.41	-0-	\$ 42,619.40
General Services				
Salaries	\$ 23,384.39		21,855.51	
Other Personal Services	297.50		536.00	
General Expenses	201,282.06		181,267.22	
Capital Outlay	2,139.05	\$ 227,103.60	420.77	\$ 204,079.50
Fiscal				
Salaries	\$ 46,887.53		\$ 51,568.29	
Other Personal Services	541.26		670.60	
General Expenses	12,710.97		13,561.79	
Capital Outlay	680.73	\$ 60,820.49	809.61	\$ 66,610.29
General Fisheries				
Salaries	\$ 43,652.01		\$ 50,372.39	
General Expense	13,744.01		14,070.64	
Capital Outlay	6,938.18	\$ 64,334.20	7,068.67	\$ 71,511.70
Hyacinth Control				
Salaries	\$ 64,998.06		\$ 64,512.15	
Other Personal Services	628.50		624.00	
General Expenses	47,632.01		34,564.54	
Capital Outlay	230.00	\$ 113,488.57	8,954.06	\$ 108,654.75
Dingell-Johnson				
Salaries	\$ 8,784.83		\$ 91,361.44	
Other Personal Services	1,273.38		1,344.25	
General Expenses	61,677.08		64,502.37	
Capital Outlay	12,371.87	\$ 163,107.16	8,315.02	\$ 163,523.08
St. Johns River				
Salaries	\$ 6,000.00		\$ 7,044.00	
Other Personal Services	-0-		-0-	
General Expenses	4,311.61		3,365.87	
Capital Outlay	-0-	\$ 10,311.61	1,724.14	\$ 12,134.01
Fish Hatcheries				
Salaries	\$ 19,615.50		\$ 22,721.70	
Other Personal Services	10.33		1,013.50	
General Expenses	11,726.89		12,281.05	
Capital Outlay	5,802.72	\$ 37,153.46	-0-	\$ 36,016.25
Fish Restoration				
Salaries	\$ 17,160.00		\$ 18,979.19	
General Expenses	23,920.41		17,183.76	
Capital Outlay	485.60	\$ 41,566.01	116.27	\$ 36,279.22
Information—Education				
Salaries	\$ 53,732.99		\$ 49,708.46	
Other Personal Services	175.00		151.25	
General Expenses	29,039.37		29,580.42	
Capital Outlay	2,553.97	\$ 85,501.33	7,100.11	\$ 86,540.24
Magazine Publication				
Salaries	\$ 17,554.00		\$ 17,550.00	
Other Personal Services	3,695.64		3,240.75	
General Expenses	76,914.88		49,538.06	
Capital Outlay	-0-	\$ 98,164.52	208.80	\$ 70,537.61
Pittman-Robertson				
Salaries	\$ 95,003.02		\$ 96,975.97	
Other Personal Services	4,015.15		5,605.63	
General Expenses	110,108.12		95,393.41	
Capital Outlay	38,994.06	\$ 251,120.35	19,459.73	\$ 217,434.74
State Hunts				
Salaries	\$ 26,224.19		\$ 25,342.00	
Other Personal Services	43,124.55		38,751.70	
General Expenses	40,147.24		58,091.42	
Capital Outlay	100.63	\$ 109,596.01	6,840.04	\$ 129,025.16
National Forest Hunts				
Salaries	-0-		-0-	
Other Personal Services	10,812.02		9,640.58	
General Expenses	48,127.08		28,241.03	
Capital Outlay	192.95	\$ 59,132.05	100.00	\$ 37,981.61
General Game Management				
Salaries	\$ 68,031.20		\$ 62,937.20	
Other Personal Services	4,178.27		6,031.42	
General Expenses	39,638.56		51,575.79	
Capital Outlay	2,095.41	\$ 113,943.44	744.17	\$ 121,288.58

Schedule C (continued)
Disbursements by Departments

	1962-63		1963-64	
	Budget Total	Department Total	Budget Total	Department Total
South Florida Region				
Salaries	\$116,656.62		\$138,017.06	
Other Personal Services	58.00		-0-	
General Expenses	49,491.39		63,261.74	
Capital Outlay	25,604.77	\$ 191,810.78	16,796.60	\$ 218,075.40
Northeast Florida Region				
Other Personal Services	560.33		-0-	
Salaries	\$156,164.44		\$161,142.85	
General Expenses	54,524.50		62,316.66	
Capital Outlay	18,714.21	\$ 229,963.48	20,808.00	\$ 244,267.51
Northwest Florida Region				
Salaries	\$150,040.84		\$171,515.89	
Other Personal Services	-0-		665.60	
General Expenses	49,894.29		57,298.66	
Capital Outlay	24,629.41	\$ 224,565.07	18,788.49	\$ 248,268.64
Everglades Region				
Salaries	\$121,039.63		\$139,715.64	
Other Personal Services	440.00		200.00	
General Expenses	72,972.88		86,856.34	
Capital Outlay	10,634.84	\$ 205,087.35	16,375.98	\$ 243,147.96
Central Florida Region				
Salaries	\$142,607.74		\$161,847.87	
General Expenses	52,525.99		57,826.82	
Capital Outlay	16,348.54	\$ 211,482.27	30,811.73	\$ 250,486.42
Communications Division				
Salaries	\$ 60,122.96		\$ 67,791.71	
Other Personal Services	99.85		310.99	
General Expenses	31,884.00		34,302.99	
Capital Outlay	10,647.43	\$ 102,754.24	18,691.95	\$ 121,097.64
Aviation Division				
Salaries	\$ 46,522.67		\$ 40,075.61	
General Expenses	38,297.15		30,415.02	
Capital Outlay	16,247.98	\$ 84,982.29	44.95	\$ 70,535.58
Recreation Fund				
Salaries	-0-		5,898.86	
General Expenses	-0-	-0-	17,552.08	\$ 23,450.94
Worlds Fair				
General Expenses	-0-	-0-	8,620.74	\$ 8,620.74
Grand Total		\$2,724,878.09		\$2,834,186.97

